

## ABSTRACT OF THE DISCLOSURE

A III-V nitride semiconductor substrate comprising a III-V nitride semiconductor single crystal at least in a surface portion thereof, the product of [H] and [D] being  $1 \times 10^{25}$  or less, wherein [H] represents the concentration of hydrogen atoms (the number of hydrogen atoms per  $\text{cm}^3$ ) in a surface portion of the single crystal, and [D] represents a dislocation density (the number of dislocations per  $\text{cm}^2$ ) on a single crystal surface.